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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,787	02/11/2000	Laurent Coen	03495.0187	4369

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EXAMINER	
BRANNOCK, MICHAEL T	
ART UNIT	PAPER NUMBER
1646	

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13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/501,787	Coen et al.
Examiner	**Art Unit**
Michael Brannock, Ph.D	1646

-- The MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Apr 4, 2002*

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-5 and 8-37* is/are pending in the applica

4a) Of the above, claim(s) *12-30 and 32* is/are withdrawn from considera

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-5, 8-11, 31, and 33-37* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirem

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 10
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Status of Application: Claims and Amendments

1. Applicant is notified that the amendments put forth in Paper 12, 4/4/02, have been entered in full.

2. Claims 1-5, 8-31 and new claims 32-37 are pending. Claims 12-30, 32, withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Further, claims 1-5 and 8-11 are being examined only to the extent that the claims read on the in vivo delivery of a composition comprising fragment C of tetanus toxin plus at least 11 amino acids of fragment B. Further, claims 8-11, 31, 33-37 are being examined to the extent that they read on SMN protein, as set forth previously.

Priority

3. Applicant is notified that the application appears to comply with conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e).

Information Disclosure Statement

4. Applicant argues that Canadian applications CA 1152493 and CA 1178949 can serve as English translations of EP 0030496 because EP 0030496 is related to the same family as CA

1152493 and CA 1178949. Thus, EP 0030496 will be considered to the extent that CA 1152493 and CA 1178949 are accurate translations of EP 0030496 (MPEP 609 A2). Applicant is invited to submit a copy of the PTO 1449, wherein consideration of EP 0030496 may be made of record.

Claim Rejections

5. Claims 31 and 34-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 31 claims a method for treating a CNS disease comprising administering a fusion protein, yet the claim fails to recite a step or steps that lead back to and accomplish the goal set forth in the preamble of the claim. There is no requirement that the composition be effective at treating the disorder. It is suggested that the phrase "wherein said fusion protein effectively treats said patient" would obviate this rejection.

6. The rejection of claims 1-11 under 35 U.S.C. 112, first paragraph, as set forth in item 8 of Paper 9, is withdrawn in view of Applicants' amendments put forth in Paper 12

7. The rejection of claim 1 is under 35 U.S.C. 102(b) as being anticipated by Boucher et al., Infection and Immunity 62(2)449-456, 1994, as set forth item 10 of Paper 9, is withdrawn in view of Applicants' amendments put forth in 12.

8. The rejection of claims 1-5 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No: 5780024, as set forth item 11 of Paper 9, is withdrawn in view of Applicants' amendments put forth in 12.

9. Claims 1-8, 11, 31, 34, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No: 5780024 in view of Fairweather et al., Infection and Immunity 55(11)2541-2545, 1987.

Claim 1 has now been amended to require that the fusion protein comprise at least 11 amino acids of the tetanus toxin Fragment B.

U.S. Patent No: 5780024 discloses an in vivo method for delivery (e.g. intramuscular, see col 4) of a composition (SOD:Tet451), comprising a the tetanus toxin C fragment recombinantly fused to a second protein (e.g. SOD-1, see the Abstract), wherein said second protein is fused downstream to the tetanus toxin C fragment (see col 6) and wherein the fusion protein is capable of in vivo retrograde axonal transport and transynaptic transport in to the CNS (e.g. from systemic administration to the brain stem, see col 1). Further, U.S. Patent No: 5780024 disclosed

that the method can be used in the treatment of neurodegenerative diseases of the CNS (see col 1 for example).

U.S. Patent No: 5780024 discloses that the tetanus toxin C fragment used in the method of delivery can include additional amino acids, see col 6, as a matter of routine optimization of operating perimeters; yet U.S. Patent No: 5780024 does not disclose, specifically, that the C-fragment should contain at least 11 amino acids of the B-fragment nor that the there should be exactly 11 (claim 37). U.S. Patent No: 5780024 disclose embodiments having 2 or 8 additional amino acids (col 6) and indicate that more or less are encompassed by the invention. Fairweather disclose the recombinant use of the tetanus toxin C-fragment including at least 11 amino acids of the B-fragment (pTet18, see page 2541, 2nd col.) Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, with reasonable expectation of success to use a Tet C fragment with at least 11 amino acids of the B-fragment (as taught by Fairweather), or simply 11 additional amino acids as suggested by U.S. Patent No: 5780024, when practicing the method taught by U.S. Patent No: 5780024. The motivation to do so was provided by both U.S. Patent No: 5780024, wherein it was taught that additional amino acids may be added to the C-fragment as a matter of routine optimization, and Fairweather et al. who taught that the C-fragment with additional amino acids of the B-fragment (pTet18) was more easy to obtain than that of the protein containing only the C-fragment (pTet11), see pg 253, last paragraph.

At pages 14-16 of Paper 12, Applicant argues that the U.S. Patent No: 5780024 does not teach transsynaptic transport of the TTC fusion protein. First Applicant attempts to distinguish between "in vivo retrograde transport" as Applicant alleges is contemplated by U.S. Patent No: 5780024, and that of "in vivo transsynaptic transport", which Applicant alleges is taught only in the instant Application (see page 14, first paragraph of Paper 12). This argument has been fully considered but not deemed persuasive. One of ordinary skill in the art appreciates that the "in vivo retrograde transport" of TTC referred to in the 5780024 patent includes both retrograde axonal transport and retrograde transsynaptic transport. This property of the TTC was old and widely known in the art at the time the 5780024 application was filed. For example, 5780024 cites Fishman et al., J. Neurological Sciences 98(311-325)1990 in reference to the behavior of TTC (see col 1 bridging col 2 of 5780024). Fishman et al. clearly state that linkage of the C-fragment of tetanus toxin to another protein may "enhance the stability of a chosen protein within the CNS as well as promote its spread by transsynaptic transport", see page 323, 1st full paragraph of Fishman et al. Also, U.S. Patent No: 5780024 clearly teaches that the TTC fragment promotes transsynaptic transport of fusion proteins. At col 4, lines 37-42, U.S. Patent No: 5780024 teaches the following:

By virtue of the TTC-mediated uptake by neurons, retrograde axonal transport within neurons, and retrograde transynaptic transport between neurons, the SOD-1/TTC hybrid protein can be delivered from the peripheral nervous system into the CNS".

Applicant argues that U.S. Patent No: 5780024 does not demonstrate that the SOD-1/TTC hybrid was actually transsynaptically transported. This argument has been fully considered but not deemed persuasive. Applicant does not assert that the SOD-1/TTC hybrid was not transsynaptically transported. U.S. Patent No: 5780024 teaches that such hybrids are transsynaptically transported, and the art recognizes that such should be expected.

Applicant argues that Fairweather teach the use of tetanus toxin for immunization and say nothing about transsynaptic transport. Applicant further urges that one of ordinary skill in the art would not be motivated to use the TTC fragments of Fairweather in the methods of the 5780024 patent. This argument has been fully considered but not deemed persuasive. The 5780024 patent references the Fairweather laboratory as a source of material for practicing the invention (see col 5, paragraph bridging col 6) and indicates that TTC moieties are encompassed by the invention. U.S. Patent 5780024 defines TTC moieties as those that contain the C-fragment plus additional amino acids comprising the B-fragment, so long as the function of the protein is not disrupted (see col 6, L31-56).

Applicant's arguments, at page 13 of Paper 12, regarding the choice of pTet 18 over pTet 11 are unpersuasive and do not appear to contradict the premise in the rejection that one skilled in the art would choose pTet18 over pTet11.

10. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No: 5780024 in view of Fairweather et al., Infection and Immunity 55(11)2541-2545, 1987, as applied to claims 1-8, 11 and 31, above, and in further view of Fishman et al., J. Neurological Sciences 98(311-325)1990.

Claims 9 and 10 require a method as claimed in claims 6-8 as discussed above, yet claims 9 and 10 also require that the composition comprise at least two of said second molecules (claim 9) or that the said second molecule be located upstream of the tetanus toxin fragment. Fishman et al. teach that a second biologically active molecule can be conjugated to the tetanus C-fragment multiple times throughout the length (upstream or downstream) of the C-fragment (see page 313, middle paragraph and Figure 1, lanes 2 and 3). Therefore, it would be an obvious matter of routine optimization of operation parameters to incorporate at least two biologically active molecules to the C-fragment of the tetanus toxin, wherein at least one was associated upstream of the C-fragment, as taught by Fishman et al. when practicing the method of U.S. Patent No: 5780024 with modifications as taught by Fairweather et al. as discussed above. The motivation to do so is provided by Fishman et al. who teach that multimeric complexes are desirable (page 13 middle paragraph). Fishman et al., also provide the artisan with a reasonable expectation of success because Fishman et al. teach that the large size of such complexes does not interfere with the uptake of the complexes into neurons (page 322, middle paragraph).

At page 17 of Paper 12, Applicant argues that Fishman et al. neither teaches or suggests the in vivo transsynaptic transport of a fusion protein containing a tetanus toxin fragment. This

argument has been fully considered but not deemed persuasive. Applicant's attention is drawn to page 323 of Fishman et al., wherein Fishman et al clearly state that linkage of the C-fragment of tetanus toxin to another protein may "enhance the stability of a chosen protein within the CNS as well as promote its spread by transsynaptic transport", see page 323, 1st full paragraph.

11. Claims 1-8, 11, 31, 33-36 are also rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No: 5780024 in view of Fairweather et al., Infection and Immunity 55(11)2541-2545, 1987, as applied to 1-8 , above, and in further view of U.S. Patent No: 6159948.

Applicant's elected species of SMN (claim 8) is not taught by either U.S. Patent No: 5780024 or Fairweather et al, as discussed above, however U.S. Patent No: 6159948 teaches the treatment of neurodegenerative disorders (e.g. spinal muscular atrophy, col 1) comprising the administration of the SMN protein (a.k.a NAIP) wherein the SMN protein is a fused to tetanus toxin or a fragment thereof (see col 21, last paragraph). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, with reasonable expectation of success to modify the C-fragment of tetanus toxin as taught by Fairweather and by U.S. Patent No: 5780024, as discussed above, with the SMN protein as taught by U.S. Patent No: 6159948, for use in a method to deliver the SMN protein to the central nervous system. The motivation to do so was provided by U.S. Patent No: 6159948 wherein it is stated that increased levels of SMN

protein (NAIP) can provide neuroprotection against neurodegenerative diseases (see the Abstract, and col 1), wherein the SMN protein should be fused to tetanus toxin or a fragment thereof (see col 21, last paragraph).

Applicant's arguments regarding Patent No: 5780024 and Fairweather et al. have been addressed above.

12. The rejection of claims 1-5 under 35 U.S.C. 103(a) as being unpatentable over Francis et al. J. Biol. Chem. 270(25)15434-15442, 1995, as set forth item 16 of Paper 9, is withdrawn in view of Applicants' amendments put forth in 12.

13. Claims 1-8, 11, 31, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Francis et al. J. Biol. Chem. 270(25)15434-15442, 1995, in view of Fairweather et al., Infection and Immunity 55(11)2541-2545, 1987.

Claim 1 has now been amended to require that the fusion protein comprise at least 11 amino acids of the tetanus toxin Fragment B.

Francis et al. disclose an in vitro method for delivery of a composition (SOD:Tet451), comprising a tetanus toxin C fragment recombinantly fused to a second protein (e.g. SOD-1, see the Abstract), wherein said second protein is fused downstream to the tetanus toxin C fragment (see col 6) and wherein, absent evidence to the contrary, the fusion protein is capable of in vivo

retrograde axonal transport and transynaptic transport in to the CNS (e.g. from systemic administration to the brain stem, see page 15434). Francis et al. did not use the method for in vivo delivery, however they proposed to do so (see the Abstract, for example). Further, Francis et al disclosed that the method could be used in the treatment of neurodegenerative diseases of the CNS (15434 see col 1 for example). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to with reasonable expectation of success to use the in vitro method of delivery disclosed by Francis et al. for in vivo delivery, as required by the instant claims. The motivation to do so was provided by Francis et al. who state the tetanus toxin has a well documented capacity for neuronal binding and internalization. In particular when administered systemically or intramuscularly to animals, the toxin is taken up selectively by motor neurons in the brain stem and spinal chord. The C-fragment retains these properties without the toxic domain (see 15434 see col 1). Further, Francis et al. hypothesize that their disclosed fusion protein could increase the delivery of the SOD-1 protein to the central nervous system in general and motor neurons in particular, potentially providing effective enzyme therapy to neurons (see 15434 see col 1).

Francis et al. disclose that it is the C-fragment of tetanus that provides for neuronal binding and internalization without toxicity, yet Francis et al. do not disclose, specifically that the C-fragment should contain at least 11 amino acids of the B-fragment. Fairweather disclose the recombinant use of the tetanus toxin C-fragment including at least 11 amino acids of the B-fragment for in vivo delivery (pTet18, see page 2541, 2nd col.) Therefore, it would have been

obvious to one of ordinary skill in the art, at the time the invention was made to, with reasonable expectation of success to use a Tet C fragment with at least 11 amino acids of the B-fragment (as taught by Fairweather) when practicing the method taught and proposed by Francis et al. The motivation to do so was provided by Fairweather et al. who taught that the C-fragment with additional amino acids of the B-fragment (pTet18) was more easy to obtain than the protein containing only the C-fragment (pTet11), see pg 253, last paragraph.

Applicant argues that the selective uptake of the tetanus toxin by motor neurons in the brain stem and spinal cord refers to in vivo retrograde axonal transport - not in vivo transynaptic transport. Applicant argues that Francis et al. do not disclose in vivo transynaptic transport. This argument has been fully considered but not deemed persuasive. Referring to the uptake of the fusion protein by motor neurons, at page 15441, col 1, last sentence of the first full paragraph, Frances et al. teach "through this pathway, the hybrid protein could access other central nervous system neurons as well, given the ability of TTC to undergo retrograde trans-synaptic transfer".

14. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Francis et al. J. Biol. Chem. 270(25)15434-15442, 1995 in view of Fairweather et al., Infection and Immunity 55(11)2541-2545, 1987, as applied to claims 1-8, 11 and 31, above, and in further view of Fishman et al., J. Neurological Sciences 98(311-325)1990.

Claims 9 and 10 require a method as claimed in claims 6-8 as discussed above, yet claims 9 and 10 also require that the composition comprise at least two of said second molecules

(claim 9) or that the said second molecule be located upstream of the tetanus toxin fragment. Fishman et al. teach that a second biologically active molecule can be conjugated to the tetanus C-fragment multiple times throughout the length (upstream or downstream) of the C-fragment (see page 313, middle paragraph and Figure 1, lanes 2 and 3). Therefore, it would be an obvious matter of routine optimization of operation parameters to incorporate at least two biologically active molecules to the C-fragment of the tetanus toxin, wherein at least one was associated upstream of the C-fragment, as taught by Fishman et al. when practicing the method of Francis with modifications as taught by Fairweather et al. as discussed above. The motivation to do so is provided by Fishman et al. who teach that multimeric complexes are desirable (page 13 middle paragraph). Fishman et al., also provide the artisan with a reasonable expectation of success because Fishman et al. teach that the large size of such complexes does not interfere with the uptake of the complexes into the neurons (page 322, middle paragraph).

Applicant argues that Fishman et al. neither teaches or suggests the in vivo transsynaptic transport of a fusion protein containing a tetanus toxin fragment. This argument has been fully considered but not deemed persuasive. Applicant's attention is drawn to page 323 of Fishman et al., wherein Fishman et al clearly state that linkage of the C-fragment of tetanus toxin to another protein may "enhance the stability of a chosen protein within the CNS as well as promote its spread by transsynaptic transport", see page 323, 1st full paragraph. Further, as indicated above, Francis also teach trans-synaptic transport.

15. Claims 6-8, 11, 31, 33, 35, 36 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Francis et al. J. Biol. Chem. 270(25)15434-15442, 1995 in view of Fairweather et al., Infection and Immunity 55(11)2541-2545, 1987, as applied to 1-8 , above, and in further view of U.S. Patent No: 6159948.

Applicant's elected species of SMN (claim 8) is not taught by either Francis et al. or Fairweather et al, as discussed above, however U.S. Patent No: 6159948 teaches the treatment of neurodegenerative disorders (e.g. spinal muscular atrophy, col 1) comprising the administration of the SMN protein (a.k.a NAIP) wherein the the SMN protein is a fused to tetanus toxin or a fragment thereof (see col 21, last paragraph). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, with reasonable expectation of success to modify the C-fragment of tetanus toxin as taught by Fairweather and by Francis et al., as discussed above, with the SMN protein as taught by U.S. Patent No: 6159948, for use in a method to deliver the SMN protein to the central nervous system. The motivation to do so was provided by U.S. Patent No: 6159948 wherein it is stated that increased levels of SMN protein (NAIP) can provide neuroprotection against neurodegenerative diseases (see the Abstract, and col 1), wherein the SMN protein should be fused to tetanus toxin or a fragment thereof (see col 21, last paragraph).

Applicant's arguments regarding Francis et al. and Fairweather et al. have been addressed above.

16. Claims 6-8, 11, 31, 33-36 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Francis et al. J. Biol. Chem. 270(25)15434-15442, 1995 in view of Fairweather et al., Infection and Immunity 55(11)2541-2545, 1987, as applied to 6-8 , above, and in further view of Liston et al., Nature 379(6563)349-53.

Francis et al., teach that SOD-1 can be used as a fusion partner of tetanus toxin C fragment for delivery into neuronal cells for the protection against free radical induced neurological disorders (see the first paragraph); however applicant's elected species of SMN (a.k.a NAIP) (claim 8) is not taught by either Francis et al. or Fairweather et al, as discussed above. Liston et al. teach that the NIAP protein can protect cells against apoptosis induced by a variety of signals, including those that underlie certain neurodegenerative disorders, e.g. spinal muscular atrophy (see the Abstract). Such signals resulting from free radical induced apoptosis (see col 2 of pg 349). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, with reasonable expectation of success to modify the C-fragment of tetanus toxin as taught by Fairweather and by Francis et al., as discussed above, with the NAIP protein as taught by Liston et al., for use in a method to deliver the NAIP protein to the central nervous system. The motivation to do so was provided by Liston et al. teach that the NIAP protein can protect cells against apoptosis induced by a variety of signals, including those that underlie certain neurodegenerative disorders, e.g. spinal muscular atrophy (see the Abstract).

Applicant's arguments regarding Francis et al. and Fairweather et al. have been addressed above.

Conclusion

No claims are allowable.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Brannock, Ph.D., whose telephone number is (703) 306-5876. The examiner can normally be reached on Mondays through Thursdays from 8:00 a.m. to 5:30 p.m. The examiner can also normally be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, Ph.D., can be reached at (703) 308-6564.

Official papers filed by fax should be directed to (703) 308-4242. Faxed draft or informal communications with the examiner should be directed to (703) 308-0294.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

MB

June 15, 2002

YVONNE EYLER, PH.D
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600